WHAT IS CLAIMED IS:

1. A database accelerator, comprising:
a primary system that holds data records having data items including primary keys, primary blocks that store the data records in the order of their primary keys, and a location table that contains in a contiguous region location table entries containing the addresses of the primary blocks; and
an accelerator system that holds a frond location table that contains in a contiguous region frond location table entries containing the addresses of the primary blocks.

2. The database accelerator of claim 1, additionally comprising:
the primary system equipped with at least one CPU; and
the accelerator system equipped with at least one CPU.

3. The database accelerator of claim 1, additionally comprising:
the primary system and the accelerator system sharing multiple CPUs.

4. A database accelerator, comprising:
a primary system that holds data records having data items including primary keys, primary blocks that store the data records in the order of their primary keys, a location table that contains in a contiguous region location table entries containing the addresses of the primary blocks, and a modification information transmission mechanism; and
an accelerator system that holds a frond location table that contains in a contiguous region frond location table entries containing the addresses of the primary blocks and a modification information application mechanism.

5. The database accelerator of claim 4, additionally comprising:
the primary system equipped with at least one CPU; and
the accelerator system equipped with at least one CPU.

6. A database accelerator, comprising:

a primary system that holds data records having data elements including primary keys, primary blocks that store the data records in the order of their primary keys, and a location table that contains in a contiguous region location table entries containing the addresses of the primary blocks;
an accelerator system that holds a frond location table that contains in a contiguous region frond location table entries containing the addresses of the primary blocks; and
means of accelerator system access by primary key that performs a binary search on the frond location table and accesses blocks on the primary system based on results indicated by frond location table entries.

7. The database accelerator of claim 6, additionally comprising:
the primary system equipped with at least one CPU; and
the accelerator system equipped with at least one CPU.

8. A database accelerator, comprising:
a primary system that holds data having data items including primary keys and alternate keys, primary blocks that store the data records in the order of their primary keys, alternate-key entries made up of alternate keys and primary keys, alternate-key blocks that include alternate-key entries, and an alternate-key location table that contains in a contiguous region alternate-key location table entries; and
an accelerator system that holds a frond alternate-key location table that contains in a contiguous region frond alternate-key location table entries.

9. The database accelerator of claim 8, additionally comprising:
the primary system equipped with at least one CPU; and
the accelerator system equipped with at least one CPU.

10. The database accelerator of claim 8, additionally comprising:
the primary system and the accelerator system sharing multiple CPUs.

11. A database accelerator, comprising:

a primary system that holds data having data items including primary keys and alternate keys, primary blocks that store the data records in the order of their primary keys, alternate-key entries made up of alternate keys and primary keys, alternate-key blocks that include alternate-key entries, and an alternate-key location table that contains in a contiguous region alternate-key location table entries; and

an accelerator system that holds a frond alternate-key location table that contains in a contiguous region frond alternate-key location table entries and a modification information application mechanism.

12. A database accelerator, comprising:

a primary system that holds data having data elements including primary keys and alternate keys, primary blocks that store the data records in the order of their primary keys, alternate-key entries made up of alternate keys and primary keys, alternate-key blocks that include alternate-key entries, and an alternate-key location table that contains in a contiguous region alternate-key location table entries;

an accelerator system that holds a alternate-key location table that contains in a contiguous region alternate-key location table entries; and

means of accelerator system access by alternate key that performs a binary search on the frond alternate-key location table and accesses alternate-key blocks on the primary system based on results indicated by frond alternate-key location table entries.